



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,147	08/04/2009	Richard Farrar	DEP5050USPCT	2006
27777	7590	03/02/2011	EXAMINER	
PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			STEWART, JASON-DENNIS NEILKEN	
			ART UNIT	PAPER NUMBER
			3738	
			NOTIFICATION DATE	DELIVERY MODE
			03/02/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jnjuspatent@corus.jnj.com  
lhowd@its.jnj.com  
gsanche@its.jnj.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,147	<b>Applicant(s)</b> FARRAR ET AL.	
	<b>Examiner</b> JASON-DENNIS STEWART	<b>Art Unit</b> 3738	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

The following is a Final Office action in response to communications received on 12/27/2010. Claims 1-15 have been cancelled. Claims 16-24, 29, 33, and 40-46 have been amended. Therefore, Claims 16-46 are currently pending and addressed below.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 16-19, 25-27, 31, 40-43, and 46 rejected under 35 U.S.C. 102(e) as being anticipated by Takei 2002/0010512.

3. Takei discloses a total knee joint prosthesis having a femoral component (Figs. 1-3) and tibial component (Fig. 2, 3, 8). The femoral component has medial and lateral condyles 8a, 8b that cooperate with the tibial bearing surfaces 11a, 11b. Furthermore, the femoral component has a cam 14 that makes contact with a post 12 of the tibial component (Claims 16, 17, 40). The cam is also in the form of a bar and extends between the medial and lateral condyles on the posterior portion of the femoral component (Figs. 4, 6) (Claims 25-27, 46), and the femoral component has a web 13

Art Unit: 3738

which contacts the cam does not contact the post during articulation of the joint (Figs.2) (Claim 31). The cam surface and post bearing surface are configured to contact one another at a flex angle of about 90 degrees (Fig. 3) (Claim 18). The knee prosthesis is functional to flexion angles of at least 150 degrees (paragraph 9) and the surface area of contact increases between the tibial post and the cam of the femoral component at flexion angles greater than 120 degrees compared at least to the surface contact area at full extension (Fig. 3) (Claim 1, 40). Regarding Claims 41-43, it should be noted that the angles at which the femoral and tibial components cooperate and the ratios of contact angles between components of the femoral and tibial components are functional limitations and hold limited patentable weight in the absence of differentiating structure.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20-24, 28-30, 32-39, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei 2002/0010512 in view of Burstein 2003/0023314.

6. Takei teaches the invention as claimed and as discussed above. Burstein also teaches a rounded cross-section of the cam as viewed along its length (Fig. 3).

However, although implied, Takei does not explicitly teach a convex surface along the

Art Unit: 3738

tibial post and a flattened or concave contact surface on the cam of the femoral component.

Burstein '314 teaches a cam that has a generally round cross section when viewed along its length (Fig. 3) (Claim 28) with a substantially flat surface 20b and a concave section in its cross section (Fig. 3) (Claims 29, 30, 44). Burstein '314 also illustrates a tibial post that is convex when viewed along the axis of the tibial axis (Fig. 4) (Claim 20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cam of Takei with the concave bearing surface of the cam of Burstein '314 in order to increase the "jumping height" of the femur with respect to the tibia at high flexion angles as taught by Burstein '314 (paragraph 25) and transmit a load to properly stabilize the joint (paragraph 6).

Regarding Claims 32-39, it should be noted that the angles at which the femoral and tibial components cooperate and the ratios of contact angles between components of the femoral and tibial components are functional limitations and hold limited patentable weight in the absence of differentiating structure. Regarding the radius of curvature of the cam, it has been held that "the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages." *In re Petersen*. **See MPEP 2144.05, Section II, Part A.**

***Response to Arguments***

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON-DENNIS STEWART whose telephone number is (571)270-3080. The examiner can normally be reached on M-F (alt Fridays off) 7:30-5:00 EST.

Art Unit: 3738

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571)272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID ISABELLA/  
Supervisory Patent Examiner, Art  
Unit 3774

/Jason-Dennis Stewart/  
Examiner, Art Unit 3738